



BUEHLER® **METADI**® DIAMOND SUSPENSIONS

BUEHLER®

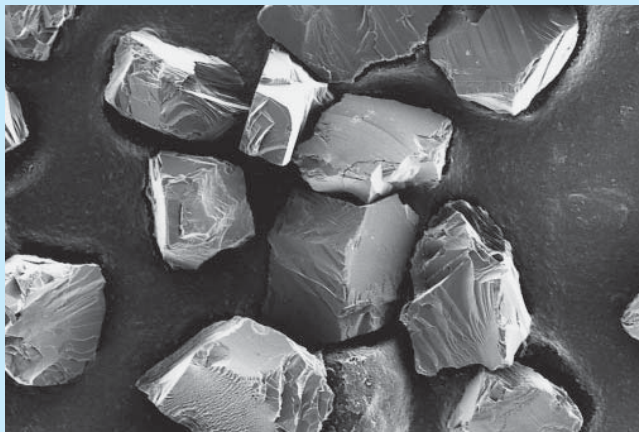
# MetaDi® Diamond Suspensions

- Superior Polishing Results
- Environmentally Safe Pump Dispensing - No CFC
- Nontoxic, Noncombustible, Water-based Formulations
- Suitable for Manual or Automatic Dispensing
- Monocrystalline and Polycrystalline Formulations

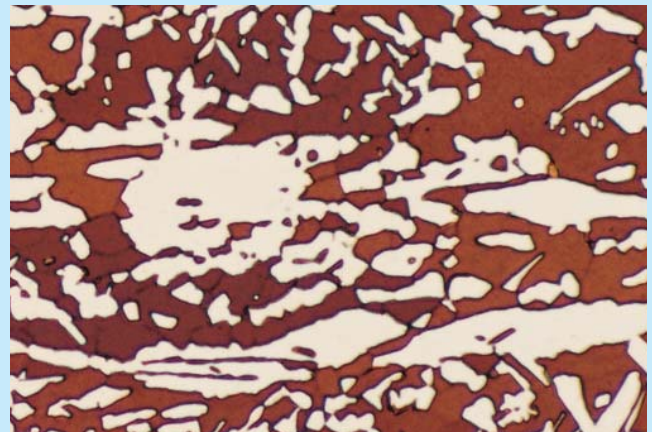
# MetaDi<sup>®</sup> Monocrystalline Diamond Suspensions

**Are environmentally safe and provide high removal rates for a wide variety of material specimen preparation applications.**

- MetaDi<sup>®</sup> Diamond Suspensions are made of virgin, natural diamond, graded for particle size as well as shape
- MetaDi Diamond Suspensions are the industry standard for routine metallographic, petrographic, and ceramographic applications due to high removal rates and quick, easy cleaning of specimens
- Diamond particles are uniformly suspended for ease-of-use and consistent application
- The finely graded diamond abrasive particles are blocky and have sharp edges to ensure a clean and efficient cutting action
- Color-coded by micron size for ease-of-use
- The water based carrier is formulated to keep the diamond from loading up and to maintain cutting efficiency
- MetaDi Suspensions are nontoxic, noncombustible, environmentally safe and meet the US Department of Transportation standards for nonflammable shipping
- Dispensable by the Buehler<sup>®</sup> PriMet<sup>®</sup> 3000 Modular Dispensing System, and other automatic dispensing systems
- Can be used with ApexHercules<sup>®</sup> and polishing cloths
- Available in 1 to 15 micron diamond abrasive sizes
- Available in 1 pt (0.47ℓ) and 1 gal. (3.8ℓ) plastic bottles with adjustable pump spray nozzle



**Sharp edges of monocrystalline diamonds in MetaDi<sup>®</sup> Diamond Suspensions ensure clean and efficient cutting action.**



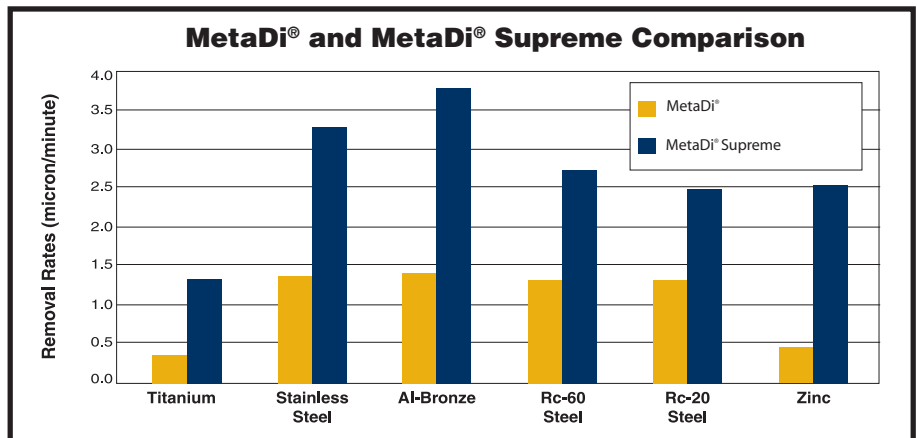
**Dual phase duplex stainless steel prepared with 6 and 1 micron MetaDi<sup>®</sup> Diamond Suspension and polished. 400x.**

# MetaDi<sup>®</sup> Supreme Polycrystalline Diamond Suspensions

**Provide highest removal rates, best surface finishes, and least subsurface deformation on metals and materials with varying compositions or hardness such as composites and ceramics.**



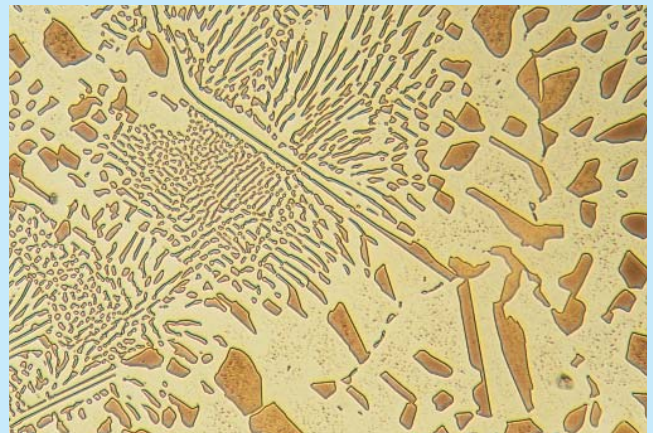
- MetaDi<sup>®</sup> Supreme can be used with fine grinding discs (ApexHercules H & S) and polishing cloths to reduce the number of preparation steps, reduce preparation time and improve cost per specimen
- Polycrystalline diamond abrasive is blocky in shape with a greater number of cutting facets than monocrystalline diamond
- Highest removal rates, finest surface finishes and lowest subsurface deformation
- Ideal when working with specimens composed of different materials or hardnesses
- Dispensable by PriMet 3000 Modular Dispensing System and other automatic dispensing systems
- MetaDi Supreme Diamond Suspensions are nontoxic, noncombustible, and environmentally safe
- Conveniently color-coded by micron size for ease-of-use
- Available in 0.05 to 45 micron diamond abrasive sizes
- Available in 8 oz. (0.24ℓ) plastic bottles with pump spray and 32 oz. (0.96ℓ) and 1 gal. (3.8ℓ) refills
- Also available in dye free



**MetaDi<sup>®</sup> Supreme polycrystalline diamond removes material two times faster, or more, than MetaDi<sup>®</sup> monocrystalline diamond suspensions and results in less subsurface deformation.**

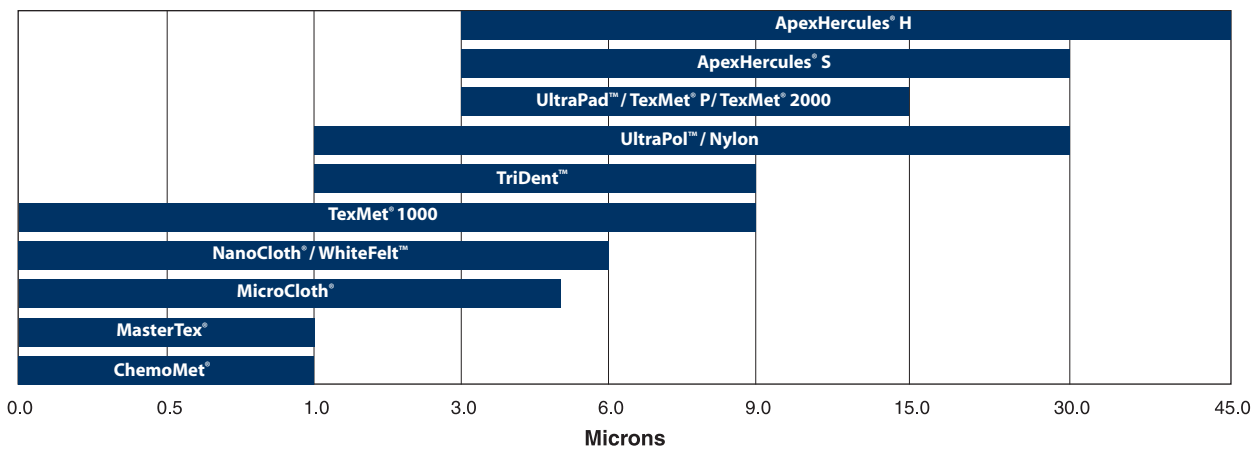


**Angular, blocky-shaped polycrystalline diamonds of MetaDi<sup>®</sup> Supreme provide numerous cutting facets on the particle surface, resulting in less deformation.**



**Silver-28% copper sand cast eutectic prepared using 6, 3 and 1 micron MetaDi<sup>®</sup> Supreme and polished. The pure silver and copper phases which are extremely soft and prone to deformation are scratch and deformation free. 500x.**

## Typical Surface Selections to Abrasive Size



### Ordering Information

#### MetaDi® Diamond Suspensions, 1 pt. (0.47ℓ)

Diamond Size	Color	Type	Catalog Number
1 micron	Blue	Water Based	40-6530
3 micron	Green	Water Based	40-6531
6 micron	Yellow	Water Based	40-6532
9 micron	Deep Red	Water Based	40-6533
15 micron	Brown	Water Based	40-6534

#### MetaDi® Supreme Polycrystalline Diamond Suspensions, 8 oz. (0.24ℓ)

Diamond Size	Color	Type	Catalog Number
0.05 micron	Charcoal	Water Based	40-6627
0.10 micron	Charcoal	Water Based	40-6628
0.25 micron	Gray	Water Based	40-6629
1 micron	Blue	Water Based	40-6630
3 micron	Green	Water Based	40-6631
6 micron	Yellow	Water Based	40-6632
9 micron	Deep Red	Water Based	40-6633
15 micron	Brown	Water Based	40-6634
30 micron	Orange	Water Based	40-6635
45 micron	Purple	Water Based	40-6636

#### MetaDi® Supreme Polycrystalline Diamond Suspensions, 32 oz. (0.96ℓ) Refill

Diamond Size	Color	Type	Catalog Number
1 micron	Blue	Water Based	40-6630-032
3 micron	Green	Water Based	40-6631-032
6 micron	Yellow	Water Based	40-6632-032
9 micron	Deep Red	Water Based	40-6633-032
15 micron	Brown	Water Based	40-6634-032

#### MetaDi® Supreme Dye Free Polycrystalline Diamond Suspensions, 8 oz. (0.24ℓ)

Diamond Size	Type	Catalog Number
1 micron	Water Based	40-6730
3 micron	Water Based	40-6731
6 micron	Water Based	40-6732
9 micron	Water Based	40-6733
15 micron	Water Based	40-6734

#### MetaDi® Supreme Dye Free Polycrystalline Diamond Suspensions, 32 oz. (0.95ℓ) Refill

Diamond Size	Type	Catalog Number
1 micron	Water Based	40-6730-032
3 micron	Water Based	40-6731-032
6 micron	Water Based	40-6732-032
9 micron	Water Based	40-6733-032
15 micron	Water Based	40-6734-032

For a complete listing of BUEHLER consumables, please refer to our Consumables Buyer's Guide. Buehler continuously makes product improvements; therefore, technical specifications are subject to change without notice.

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